Chevy Chase Neighborhood Conservation Project - Phase 3

October 4, 2007

1.0 Scope of Services

Services Categories:

There will be two categories of services:

Category 1:

Assist in developing recommended dimensional standards for Floor Area Ratio (FAR), Lot (impervious) Coverage and Wall Plate Height.

Category 2:

Provide model language for other basic standards recommended in the Phase 2 Strategy Report (i.e. Refined height measurement, tree planting requirement, minimum rear yard setback)

A. Floor Area Ratio

Preliminary FAR calculations were developed using aerial photos and approximations of floor area based on street level photography.

The FAR calculations included:

- Floor area of occupied floors at 100% of footprint

- Floor area of partial upper story or attic at 50% of footprint

- No below-grade (basement) area

Objective:

To establish a recommended FAR that is based on:

- An understanding of the established FAR patterns in the Village

- A correlation with the "preferred" FAR illustrated in Scenario D in the survey

Methodology:

1. Establish the formula for calculating FAR.

The formula should include:

- All enclosed aboveground space in the primary and all secondary structures with a ceiling height that meets the minimum standard established in the building code.

Excludes:

- Basement space that is not exposed.

- 500 s.f. of a detached garage (as an incentive to build a detached garage).

2. Understand what the current FARs patterns are in the Village:

This should include:

- An understanding of the average FARs, and a review of the distribution patterns.

- Which types of properties have the highest FARs, for example.

- Also develop an understanding of the upper range of the FARs. How many are in the upper 80th and 90th percentiles, for example.

Methodology:

a. Collect data on existing floor area for a strategic sampling of existing houses.

Options:

- Staff conducts sample in-the-field measurements.

- Architectural plans are collected.

The sample should consider these variables:

- The full range of lot sizes.

- The full range of house sizes.

- The geographic sampling throughout the Village.

Winter & Company
1265 Yellow Pine Road
Boulder, CO 80304

b. Correlate the sample with assessor's records.

In this step, we would test the ability to extrapolate data from the sampling by correlating it with the floor area information in the assessor's records.

Steps would include:

- A written description from the county of what they include in floor area.

- If that definition is clear enough, then compare their numbers for the same properties collected in the sampling. Compare the two numbers and develop an "adjustment factor."

- Then, using this adjustment factor, analyze distribution patterns of floor area throughout the Village.

3. Understand how the "preferred scenario" relates to established FAR patterns.

Using the information collected from the sampling and the adjustment to assessor's records, we would then adjust our earlier computer models to reflect the same FAR calculation method.

4. Define the "compatible FAR"

Based on the survey, and using the adjusted formula, we would then project a compatible FAR.

Then, we would compare this with the established FAR patterns. (The assumption is that the "compatible" FAR is still larger than most existing ones in the Village.) If it is not, then further modeling or review of other survey data may be needed (i.e. the written responses).

5. Define what "excessive FAR" is.

Finally, how does the "Compatible FAR" compare with recent trends that are considered inappropriate? In this step, we would calculate the FAR of these more recent projects. This would be developed from data provided by staff (either field measurements or architectural documents). We would also adjust the other scenario models from the survey that respondents indicated are out of scale and calculate their FARs.

6. Develop a proposed FAR.

The assumption is that we would set the maximum FAR based on including the predominant pattern of existing FARs as "conforming," but excluding the "excessive FAR" as defined in the survey.

B. Lot Coverage

We would use a sampling process similar to that described above.

1. The definition would have to be established:

   - All hard surfaces would be calculated, and counted at 100% to establish the base lot coverage. We would also calculate the existing patterns of building coverage.

   - Assume that calculation is to the edge of eaves?

   - Pools?

2. Determine distribution patterns.

3. Compare with modeled scenarios.

4. Develop a table for pro-rating surfaces (semi-porous, pools, etc.).

5. Determine the relationship between lot coverage and building coverage.

C. Wall Plate Height:

The same data-collection effort would yield plate height information. The objective is to set a lower plate height at the minimum setback. The plate height limit would be in effect for the first 5 feet from the minimum setback line.

Then, we would compare this with the plate heights modeled in the survey, as well as field observations of buildings in scale at the minimum setbacks.

1. Establish what is the norm?

2. What is a "compatible" height?

D. Modeling:

With the recommended numbers established for FAR, lot coverage and plate height, we would update computer models to reflect the proposed standards. These would illustrate the potential outcomes of the new regulations.

Model alternatives would probably include:

- The maximum FAR.

- The maximum lot coverage.

2.0 Schedule

1. Refine data collection instructions – One Week

2. Chevy Chase Village staff collects data – Staff Determined

3. Consultant data analysis – Two Weeks

4. Develop computer generated Models – Two Weeks

5. Submit and discuss models with staff – One Day

6. Revise models based on staff & board comments – Two Weeks

7. Develop draft standards – Two Weeks

8. Submit and discuss draft standards – One Day

9. Refine draft standards after staff & board comments – One Week

10. Submit final draft standards – One Week

This schedule assumes that the data provided is clear and there are minor edits to initial drafts. The impacts of the holidays may also affect the schedule.

3.0 Budget

See Attached Document – Chevy Chase Phase 3 Budget

We are pleased to submit a budget for Phase 3 of the Chevy Chase Village Neighborhood
Conservation Project. The initial estimates directly below provided a basis for the Phase 3: Model
Alternatives & Design Standards Budget.

Initial Estimate for Phase 3
Costs are affected by the level of detail, number of iterations and degree of public participation.
The low range costs noted below would include two additional trips for Noré Winter without expenses.
> Present Draft #1 Regulations
> Present Final Regulations
The ranges noted below are based on our experience in other communities.

	Low	High
Design guidelines	$25,000	$30,000
Design standards in code	$10,000	$20,000
Modeling of alternativ	$10,000	$20,000
Code writing	$8,000	$20,000

PHASE 3: MODEL ALTERNATIVES & DESIGN STANDARDS
The refined budget below reflects a revised estimate for Phase 3 of the Chevy Chase Village
Neighborhood Conservation Project

Tasks:
- Category 1: Assist in developing recommended dimensional standards for building
mass & scale
  - Floor Area Ratio
  - Lot (impervious) coverage
  - Wall plate height
- Category 2: Provide model language for other basic standards recommended in
Phases 2 Strategy Report
  - Refined height measurement
  - Tree planting requirements
  - Minimum rear yard setback
- Generate computer models that reflect the proposed standards
- Conduct video conferences

Products:
- Design analysis of alternative models
- Refinement of models
- Develop draft dimensional standards
- Refinement of dimensional standards

Personnel	Rate	Hours	Amount	Subtotal
N. Winter	$155	24	$3,720	
J. Husband	$115	40	$4,600	
A. Barge	$75	80	$6,000	
C. Williams	$45	80	$3,600	
Total Phase 3 Fees				$17,920

Expenses

	Cost	Quantity	Amount	Subtotal
Technical	$400	LS	$400	
Total In-House Expenses:				$400

Total Phase 3 Fees and Expenses	$18,320